

REMARKS

Applicant has reviewed the Final Office Action mailed January 30, 2004. Claims 1, 9, 14, and 21 are being Amended by this Response. The support for Claims 1, 9, and 14 is found on page 6, lines 24-25 and on page 7, lines 14-16, of the specification. Support for Claim 21 is found in FIG. 2 and on page 5 line 25 through page 6 line 9. Thus, Claims 1-9 and 11-30 are pending in the application. Support for the Amendment in the Specification is found throughout the instant application. Particularly, FIG. 2 discloses an interface architecture between bus interfaces 204, 206, and 208 and arbiter 210 which is similar in every respect to the interface 212, except for the words provided along the three lines which comprise the interface 212 in FIG. 2. Further, the statement contained in the original Specification, “[p]referably, only commands are intercepted, since the other data, such as completion and data includes ID and tag data,” implies that alternative embodiments were considered in arriving at this preferred embodiment. Applicant hereby requests further examination and reconsideration of the application in view of the following remarks.

Claim Rejection – 35 U.S.C. §102

Claims 1-6, 8-9 and 11-13 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,266,778, hereinafter “Bell”. Applicant respectfully traverses this rejection.

A Claim is anticipated by a reference if that reference discloses all the non-inherent elements of that Claim. M.P.E.P. § 2131. Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *W.L. Gore & Assocs. v. Garlock*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Further, “anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.” *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added).

With respect to Claim 1, the Bell reference fails to disclose “a command

queuing interface including a first path suitable for enqueueing a transaction” and “a command completion interface including a second path suitable for reporting transaction completion”, as recited in Claim 1 of the instant application. Bell discloses the use of buses to connect devices with controllers and/or bridges, but does not disclose the limitation of having separate paths for the command queuing and command completion. Applicant respectfully requests the withdrawal of the §102(e) rejection and allowance of Claim 1. Applicant further requests the withdrawal of the §102(e) rejection and allowance of Claims 2-6 and 8, which are believed to be allowable based on dependence from an allowable Claim 1.

With respect to Claim 9, the Bell reference fails to disclose, “a command queuing interface including a first path” and “a command completion interface including a second path”, as recited by Claim 9 of the instant application. As mentioned above, Bell discloses the method of using buses to connect devices with controllers and/or bridges, but does not disclose the method having separate paths for the command queuing and command completion. Applicant respectfully requests the withdrawal of the §102(e) rejection and allowance of Claim 9. Applicant further requests the withdrawal of the §102(e) rejection and allowance of Claims 11-13, which are believed to be allowable based on dependence from an allowable Claim 9.

Claim Rejection – 35 U.S.C. §103

Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 6,266,778, hereinafter “Bell” in view of US Patent 6,449,677, hereinafter “Olarig”. Claims 14-18 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bell in view of US Patent 6,067,071, hereinafter “Kotha”. Claim 19 is rejected under 35 U.S.C. §103(a) as being unpatentable over Bell in view of Kotha and further in view of US Patent 6,061,754, hereinafter “Cepulis”. Applicant respectfully traverses these rejections for the following reasons.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP §2143, *In re Ryoka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). See also *In re Wilson*, 165 U.S.P.Q. 494 (C.C.P.A. 1970).

With respect to Claim 7, neither the Bell reference nor the Olarig reference disclose “a command queuing interface including a first path suitable for enqueueing a transaction” and “a command completion interface including a second path suitable for reporting transaction completion”, as recited in Claim 1 of the instant application, from which Claim 7 properly depends. Bell discloses the use of buses to connect devices with controllers and/or bridges, but does not disclose the limitation of having separate paths for the command queuing and command completion. Olarig is cited for the disclosure of the first bus interface controller conforming to a SCSI standard, which the Examiner states that Bell does not explicitly disclose. However, Olarig does not cure the defect in Bell in reference to Claim 1 of the present invention. Applicant respectfully requests withdrawal of the §103(a) rejection and allowance of Claim 7.

With respect to the §103(a) rejection of Claims 14-18 and 20, neither the Bell reference nor the Kotha reference disclose “a command queuing interface including a first path” and “a command completion interface including a second path”, as recited in Claim 14 of the instant application. Bell discloses the use of buses to connect devices with controllers and/or bridges, but does not disclose the limitation of having separate paths for the command queuing and command completion. Kotha is cited for the disclosure of the first and second bus interface controllers as cores, which the Examiner states Bell does not explicitly disclose. However, Kotha does not cure the defect in Bell in reference to Claim 14 of the present invention. Applicant respectfully requests withdrawal of the §103(a) rejection and allowance of Claim 14. Further, Applicant respectfully requests withdrawal of the §103(a) rejection and allowance of Claims 15-18 and 20, which properly depend from an allowable Claim 14.

With respect to the §103(a) rejection of Claim 19, neither the Bell reference nor the Kotha reference nor the Cepulis reference disclose “a command queuing interface including a first path” and “a command completion interface including a second path”, as recited in Claim 14 of the instant application, from which Claim 19 properly depends. Bell discloses the use of buses to connect devices with controllers and/or bridges, but does not disclose the limitation of having separate paths for the command queuing and command completion. Kotha is cited for the disclosure of the first and second bus interface controllers as cores. Cepulis is cited for the disclosure of the bus bridge/switch

interfaces conforming to a USB standard, a SCSI standard, and a fiber standard, which the Examiner states that neither the Bell nor Kotha references disclose. However, Cepulis does not cure the defect in Bell in reference to Claim 14. Applicant respectfully requests withdrawal of the §103(a) rejection and allowance of Claim 19, which properly depends from an allowable Claim 14.

Claim 21 was rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 6,266,778, hereinafter "Bell" in view of US Patent 5,745,732, hereinafter "Chekuri". Claims 22-23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bell in view of Chekuri and further in view of US Patent 6,578,096, hereinafter "Steinmetz". Claims 24-26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bell in view of Chekuri, Steinmetz, and further in view US Patent 6,061,754, hereinafter "Cepulis". Claims 27-29 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bell in view of Chekuri, Steinmetz, Cepulis, and further in view US Patent 6,067,071, hereinafter "Kotha". Applicant respectfully traverses these rejections for the following reasons.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP §2143, *In re Ryoka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). See also *In re Wilson*, 165 U.S.P.Q. 494 (C.C.P.A. 1970).

With respect to Claim 21, neither Bell nor Chekuri teach, suggest, or disclose, "wherein the third bus interface controller is coupled to the first and second bus interfaces through the arbiter via a plurality of interfaces including a command queuing interface having a first path suitable for enqueueing a transaction; a command completion interface having a second path suitable for reporting transaction completion", as recited in Claim 21 of the instant application. Bell discloses the use of buses to connect devices with controllers and/or bridges, but does not disclose the limitation of having separate paths for the command queuing and command completion. Chekuri is recited for teaching an arbiter which the Examiner states is not explicitly disclosed by the Bell reference. However, the Chekuri reference fails to cure the defect, identified above, in Bell. Applicant respectfully requests withdrawal of the §103(a) rejection and allowance of Claim 21. Applicant respectfully requests withdrawal of the §103(a) rejection and allowance of Claims 22-29, which properly depend from an allowable Claim 21.

Claim 30 was rejected was rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 6,449,677, hereinafter "Olarig", in view of US Patent 6,266,778, hereinafter "Bell" and further in view of US Patent 6,067,071, hereinafter "Kotha". Applicant respectfully traverses this rejection for the following reasons.

As the Office is aware, obviousness cannot be established by combining the teaching of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 221 USPQ 929 (Fed. Cir. 1984). Thus, the Office may not use the patent application as a basis for the motivation to combine or modify the prior art to arrive at the claimed invention.

The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." *In re Oetiker*, 977 F.2d 1443, 24 USPQ 2d 1443 (Fed. Cir. 1992) quoting *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988).

In the present case, the Office has selected portions from three references to arrive at the present invention, in which, none of the references supply the motivation for the additional reference as proposed. Rather, the references are relied upon for selected elements, but the desirability of the elements in the combination has not been supplied by the references themselves, but rather by the Examiner impermissibly using the present application as a template. Since the references do not supply the desirability of the modification, it is respectfully submitted that a *prima facie* case of obviousness has not been established.

As the Office is well aware, Applicants are required to seasonably challenge statements by the Office that are not supported on the record. M.P.E.P. §2144.03.

Further, it is noted that "Official Notice" is to be limited to instances where the facts are "capable of instant and unquestionable demonstration as being well-known". M.P.E.P. §2144.03. This is not the present situation. First, in accordance with M.P.E.P. §904 it is presumed that a full search was conducted and this search is indicative of the prior art. The search failed to disclose a reference which would teach or suggest modifying the Olarig reference to achieve the present invention wherein an interface is established with distinct commands and paths for those commands as is provided by the present invention. Consequently, the search revealed that the asserted substitution is not well-known and therefore is not entitled to be relied upon in order to reject the present claimed invention. If the Office is unable to provide such a reference, and is relying on facts based on personal knowledge, Applicants hereby request that such facts be set forth in an affidavit from the Examiner under 37 C.F.R. 1.104(d)(2). Absent substantiation by the Examiner, it is respectfully requested that the rejection under 35 U.S.C. § 103 be withdrawn.

Amendment of Claims After Final Action -- 37 CFR §1.116

"After a final rejection or other final action (§ 1.113) in an application . . . amendments may be made canceling claims or complying with any requirement of form expressly set forth in a previous Office action". 37 CFR § 1.116(b). Any amendment that will place the application either in condition for allowance or in better form for appeal may be entered. MPEP § 714.12.

Applicant respectfully submits that the amendment to independent Claims 1, 9, and 14 places the present application in a condition for allowance or alternately in better form for appeal. By including the limitation of a command queuing interface including a first path and a command completion interface including a second path, amended independent Claims 1, 9, and 14 provide a sufficiently limited universe within which the invention of the present application may execute its function. Applicant respectfully submits that the amendment to independent Claim 21 places the present application in a condition for allowance or alternately in better form for appeal. By including the limitation of a plurality of interfaces, amended independent Claim 21 provides a sufficiently limited universe within which the invention of the present application may

execute its function.

Because the amendments merely requires only a cursory review by the examiner, applicant respectfully requests the amended claims be entered under MPEP § 714.13. “The proposed amendment should be given sufficient consideration to determine whether the claims are in condition for allowance...” MPEP §714.13.

Amended independent Claims 1, 9, 14, and 21 merely require only a cursory review by the examiner and does not require a further search of relevant art due to the fact that the elements recited in amended independent Claims 1, 9, 14, and 21 have been explicitly and/or inherently included within the specification of the present application since its filing date. Since the limitations recited in amended independent Claims 1, 9, 14, and 21 clearly encompass a new invention that has not been recited in any prior art reference of record or combination of references of record, amended Claims 1, 9, 14, and 21 place the present application in a condition for allowance without requiring more than a cursory review by the examiner.

Therefore, it is respectfully requested that the examiner enter the amended independent Claims 1, 9, 14, and 21 under 37 CFR §1.116 as they place the application in condition for allowance or in better form for appeal (MPEP §714.12) and require no more than a cursory review (MPEP §714.13).

CONCLUSION

The application is respectfully submitted to be in condition for allowance. Accordingly, notification to that effect is earnestly solicited. In the event the indication of allowability is withdrawn, applicants reserve the right to amend the claims back to the original form for further prosecution, without prejudice, disclaimer or estoppel. In the event that issues arise in the application that may readily be resolved via telephone, the Examiner is kindly invited to contact the undersigned Attorney at (402) 496-0300 to facilitate prosecution of the application.

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Respectfully submitted,
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